

CLAIMS

1. An optical laminate, comprising a cholesteric liquid crystal layer and a quarter-wave plate laminated on the cholesteric liquid crystal layer, wherein the quarter-wave plate includes at least one layer of a material having a positive intrinsic birefringence value (layer A) and at least one layer of a material having a negative intrinsic birefringence value (layer B), the layer A and the layer B having the same molecular chain orientation, and the quarter-wave plate having a variation in thickness of 5% or less.

2. The optical laminate according to claim 1, wherein the quarter-wave plate is a quarter-wave plate obtained by stretching a laminate obtained by coextruding the material having a positive intrinsic birefringence value and the material having a negative intrinsic birefringence value.

3. The optical laminate according to claim 1 or 2, wherein the material having a positive intrinsic birefringence value is an alicyclic structure-containing polymer resin having a content of a resin component with a molecular weight of 2,000 or less of 5 wt% or less.

4. The optical laminate according to any of claims 1 to 3, wherein the material having a negative intrinsic birefringence value is a vinyl aromatic polymer.

5. The optical laminate according to any of claims 1 to 4, wherein the quarter-wave plate has a configuration consisting of the layer A, the layer B, and the layer A, or consisting of the layer B, the layer A, and the layer B.

6. A polarized light source device, comprising the optical laminate according to any of claims 1 to 5.

7. The polarized light source device according to claim 6, comprising a light reflecting layer, a light source, and the optical laminate according to any of claims 1 to 5, wherein the light reflecting layer, the light source, and the optical laminate are disposed so that light emitted from the light source is incident on the optical laminate from a side of the cholesteric liquid crystal layer, and reflected circularly polarized light reflected by the optical laminate is reflected by the light reflecting layer and is incident on the optical laminate.

8. A liquid crystal display device, comprising the polarized light source device according to claim 6 or 7.